

# General Permit for the Discharge of Groundwater Remediation Wastewater Directly to Surface Water

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# **General Permit for the Discharge of Groundwater Remediation Wastewater Directly to Surface Water**

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# **General Permit for the Discharge of Groundwater Remediation Wastewater Directly to Surface Water**

## **Section 1. Authority**

This general permit is issued under the authority of Section 22a-430b of the General Statutes.

## **Section 2. Definitions**

Terms used in this general permit shall be defined as they are in Section 22a-423 of the General Statutes and Section 22a-430-3(a) of the Regulations of Connecticut State Agencies. For purposes of this general permit, the following definitions shall also apply:

"7Q10 flow (seven-day, ten year low flow)" means the lowest seven consecutive day mean stream flow with a recurrence interval of ten years.

"Approval of Registration" means an approval of registration issued under Section 3 of this general permit.

"Aquifer protection area" means aquifer protection area as defined by Section 22a-354h of the General Statutes.

"Attachment A" means Attachment A to this general permit.

"Authorized discharge" means a discharge authorized by this general permit.

"BMP" or "best management practice" means a practice procedure, structure, or facility designed to prevent or minimize environmental damage or to maintain or enhance environmental quality. BMPs include without limitation, facilities to reduce pollutants in wastewater and practices or structures to minimize the generation of waste, to control runoff, drainage, spillage, or leaks of contaminated material, to protect sources of drinking water and drinking water wells, and to protect streamflows and aquatic life.

"Bioaccumulate" means the uptake and retention of substances by an organism from its surrounding medium and/or food.

"Bioconcentrate" means the uptake and retention of substances by an organism from its surrounding medium.

"CERCLA" means Comprehensive Environmental Response, Compensation, and Liability Act.

"Certified Hazardous Materials Manager" means a person who has gained recognition as a certified hazardous materials manager in accordance with the requirements developed and administered by the Institute of Hazardous Materials Management.

"CFR" means the Code of Federal Regulations.

- "Coastal boundary" means coastal boundary as defined by Section 22a-94 of the General Statutes.
- "Commissioner" means the commissioner as defined by Section 22a-2(b) of the General Statutes.
- "Cone of depression" means an area surrounding a withdrawal of groundwater, the cross sectional border of the point(s) at which groundwater recharge equals the rate of withdrawal.
- "Department" means the department of environmental protection.
- "DSN" means discharge serial number, i.e. an identifying number 101, 102, 103, etc. designating each discreet discharge to a surface water consisting solely of wastewater authorized by this general permit.
- "Effluent" means the wastewater authorized to be discharged by this general permit after treatment and prior to mixing with liquid from any other source.
- "Effluent limitation" means an effluent limitation established in this general permit, including limitations specified in Attachment A of this general permit.
- "Endangered or threatened species" means endangered or threatened species as defined by Section 26-304 of the General Statutes.
- "EPA" means the United States Environmental Protection Agency.
- "General Statutes" means the Connecticut General Statutes.
- "Groundwater remediation wastewater" means wastewater generated in connection with investigating pollution or remediating polluted groundwater or soil. Groundwater remediation wastewater includes without limitation groundwater withdrawn from a groundwater recovery well; groundwater which collects in an excavation or foundation drain or other subsurface facility or structure; groundwater contaminated runoff and stormwater impacted by on-site pollutants from any construction activity; condensate resulting from construction or maintenance of a soil vapor extraction system; washdown or backwash wastewater from treatment facilities; well development wastewater, and wastewater generated by removing an underground tank used at any time for storage of petroleum or petroleum products or by developing, testing, sampling, or purging a well, or by maintaining treatment facilities.
- "Individual permit" means a permit issued to a named person or municipality under Section 22a-430 of the General Statutes.
- "Influent" means the groundwater to be discharged prior to any treatment except for the implementation of BMPs at pump intakes for the control of solids.
- "Inland Wetlands" means wetlands as defined by Section 22a-38 of the General Statutes.

- "Intermittent discharge" means a discharge that is generated at scheduled intervals related to activities such as groundwater monitoring, site investigation, groundwater pump tests, or related activities. Discharges that temporarily cease due to treatment system shutdown, lack of available groundwater or other unscheduled reasons are not intermittent as defined by this general permit.
- "Licensed Environmental Professional" means an environmental professional licensed pursuant to the requirements of Section 22a-133v of the General Statutes.
- "Liquid" means a substance which flows freely like water and is characterized by free movement of constituent molecules among themselves without the tendency to separate.
- "Mg/l" means milligrams per liter.
- "Monitoring requirement" means the requirements specified in Section 5(b) of this general permit for the evaluation of wastewaters being discharged.
- "NOAEL" or "no observable acute effect level of greater than or equal to 100%" means that a sample of non-diluted effluent analyzed by a toxicity test conducted pursuant to Section 22a-430-3(j)(7)(A) of the Regulations of Connecticut State Agencies, as required in Section 5(b)(6) of this general permit, demonstrates 90% or greater survival for each test organism.
- "Oxygenates" means fuel additives (alcohols and ethers) that contain oxygen which can boost gasoline's octane quality, enhance combustion, and reduce exhaust emissions.
- "Permittee" means a person who or municipality which initiates or maintains an authorized discharge.
- "P.E." means a professional engineer licensed by the Connecticut Department of Consumer Protection.
- "Quantification Level" means the lowest concentration of a pollutant that an analytical methodology can detect and determine the concentration of in accordance with 40 CFR 136 or other accepted protocols.
- "Recovery well" means a well used to pump contaminated groundwater.
- "Registrant" means a person who or municipality which files a registration.
- "Registration" means a registration filed pursuant to Section 4 of this general permit.
- "Remote site" means a site on which groundwater remediation equipment is installed and operates but on which the permittee does not maintain other commercial activity.
- "Screening analysis" means an analysis performed to satisfy the registration requirements of Section 4 of this permit, and the ongoing screening analysis required pursuant to Section 5(a) of this permit for the evaluation of groundwater prior to treatment for the removal of pollutants.

- "Screening form" means form no. DEP-PED-SCREEN-020 as provided by the commissioner.
- "Site" means geographically contiguous land or water from which an authorized discharge takes place or from which a discharge for which authorization is sought under this general permit is proposed to take place. Non-contiguous land or water owned by the same person or municipality and connected by a right-of-way which such person or municipality controls and from which the public is excluded shall be deemed the same site.
- "Target Compound" means a compound that is identified and quantified in accordance with 40 CFR 136, or other accepted protocols.
- "TIC" or "tentatively identified compound" means a chemical compound detected in a sample that is not a target compound, internal standard, system monitoring compound or surrogate.
- "Tidal wetland" means wetland as defined by Section 22a-29 of the General Statutes.
- "Total petroleum hydrocarbons analysis" means analysis conducted in accordance with 40 CFR 136 to determine the concentration of gross oil or hydrocarbon in a substance or material.
- "Toxic" means having the ability to adversely affect the survival, growth, or reproduction of organisms or humans through either direct contact or consumption.
- " $\mu g / l$ " means micrograms per liter.
- "VOC" or "volatile organic compound" means volatile organic compound as defined in 40 CFR 51.100(s).
- "Volume proportioned average" is a calculated concentration of pollutants in a wastewater generated by multiplying the pollutant concentration in multiple samples by the relative volume, as a percentage of the total wastewater represented by each sample and adding all results.
- "Watercourse" means a watercourse as that term is defined by Section 22a-38 of the General Statutes, including those waters designated as Coastal Waters as defined by Section 22a-93 of the General Statutes.
- "Well development" means the pumping of a well to accomplish the removal of scale or other fine materials from its sides.
- "Well point dewatering" means the process of dewatering an area, including an excavation, by pumping a well or wells located outside such area.
- "Well purging" means removing standing water from a well to encourage inflow of surrounding groundwater.

### Section 3. Authorization Under this General Permit

## (a) Eligible Activities

The following discharge is authorized by this general permit, provided the requirements of subsection (b) of this section are satisfied:

Any discharge of groundwater remediation wastewater to a surface water, either through a dedicated conveyance, or through any other conveyance system that the permittee is authorized to utilize.

All other discharges of water, substances or materials into the waters of the state are not authorized under this general permit, and any person who or municipality which initiates, creates, originates, or maintains such a discharge shall first apply for and obtain authorization under Section 22a-430 or 22a-430(b) of the General Statutes.

## (b) Requirements for Authorization

This general permit authorizes a discharge comprised solely of groundwater remediation wastewater, provided that:

## (1) Registration

- (A) Except as provided in subsection (b)(1)(B) of this section, a completed registration with respect to such discharge has been filed with the commissioner.
- (B) A completed registration with respect to such discharge has been filed with the commissioner and the commissioner has issued an Approval of Registration with respect to such discharge if:
  - (i) A registrant is proposing to use a substance to treat the discharge, or
  - (ii) groundwater remediation wastewater to be discharged contains any pollutant, excluding temperature, solids and oxygenates, for which no limit is specified in Attachment A, or
  - (iii) radioactive material as defined by Section 22a-148 of the General Statutes has been deposited on the site from which such discharge takes place or is proposed to take place.

#### (2) Coastal Area Management

Such discharge is consistent with all-applicable goals and policies in Section 22a-92 of the General Statutes, and will not cause adverse impacts to coastal resources as defined in Section 22a-93 of the General Statutes.

## (3) Endangered or Threatened Species

Such activity must not threaten the continued existence of any species listed pursuant to Section 26-306 of the Connecticut General Statues as endangered or threatened and must not result in the destruction or adverse modification of habitat designated as essential to such species.

- (4) Such discharge is not subject to any provision of 40 CFR 403 through 40 CFR 471, inclusive.
- (5) If radioactive material as defined by Section 22a-148 of the General Statutes has been deposited on the site from which discharge takes place or is proposed to take place, such discharge is performed and monitored in accordance with the applicable conditions 10 CFR 50.36a "Technical specifications on effluents from nuclear power reactors" plus 10 CFR 20 Appendix B "Standards for Protection Against Radiation" and 40 CFR 190, "Environmental Radiation Protection Standards For Nuclear Power Operations".
- (6) If such site is a solid waste disposal area, as defined in Section 22a-207 of the General Statutes, for which the department has required that a groundwater monitoring plan be approved by the commissioner, the commissioner has approved such a plan.
- (7) The combined maximum daily flow of all groundwater remediation wastewater generated at such site does not exceed ten per cent of the 7Q10 flow of the watercourse into which such wastewater is discharged or, if all such wastewater is directed to a manmade impoundment or a natural lake or pond, the combined maximum daily flow of such wastewater does not exceed one-half of one per cent of the water volume of such impoundment, lake, or pond.
- (8) Any local authorizations required for such a discharge or associated activities have been obtained.
- (9) Such discharge does not physically disturb any tidal wetland or reduce the salinity of any tidal, navigable, or coastal water by more than five per cent.
- (10) Such discharge does not affect a watercourse, or any tributary thereto, which is or contributes to a source of drinking water.
- (11) Water Diversion Policy Act

Any site subject to groundwater withdrawal at a rate exceeding 50,000 gallons in any twenty-four hour period shall:

- (A) have in effect a valid license issued by the commissioner pursuant to Sections 22a-368 or 22a-378a of the General Statutes, or
- (B) be exempt pursuant to Section 22a-377(b)-1(a) of the Regulations of Connecticut State Agencies.

## (c) Geographic Area

This general permit applies throughout the State of Connecticut.

## (d) Effective Date and Expiration Date of this General Permit

This general permit is effective on the date it is issued by the commissioner and shall expire five years from such date.

## (e) Effective Date of Authorization Under this General Permit

- (1) Except as provided in subsection (e)(2) of this section, a discharge of groundwater remediation wastewater is authorized on the date the commissioner receives a completed registration with respect to such discharge.
- (2) A discharge for which an approval of registration is required under subsection (b)(1)(B) of this section is authorized on the date the commissioner issues an approval of registration with respect to such discharge.

## (f) Revocation of an Individual Permit

If a discharge which is eligible for authorization under this general permit is presently authorized by an individual permit, such individual permit may be revoked by the commissioner upon a written request by the permittee. If the commissioner revokes such individual permit in writing, such revocation shall take effect on the effective date of authorization of such discharge under this general permit.

## (g) Issuance of an Individual Permit

If the commissioner issues an individual permit authorizing a discharge which has already been authorized by this general permit, this general permit shall cease to authorize such discharge on the date such individual permit is issued.

## **Section 4. Registration Requirements**

## (a) Who Must Submit a Registration

Any person or municipality seeking to initiate, create or maintain a discharge of groundwater remediation wastewater under the authority of this general permit shall file with the commissioner (1) a registration which meets the requirements of this section and (2) the applicable fee specified by subsection (c) of this section.

## (b) Scope of Registration

A registrant shall register on one registration form every discharge originating from a single site for which discharge the registrant seeks authorization under this general permit. Discharges originating from more than a single site may not be registered on the same registration form.

## (c) Contents of Registration

#### (1) Fees

(A) Except as provided in subsections (B) and (C) of this section, a registration fee of \$500 for any person and \$250 for any municipality shall be submitted with a registration form.

- (B) A registration fee of \$1,000 for any person or \$500 for any municipality shall be submitted for any discharge of groundwater remediation wastewater for which an approval of registration is required under Section 3(b)(1)(B) of this general permit.
- (C) Discharges from a building used solely as a single-family residence shall be exempt from the fees required under Section 4(c)(1) of this general permit.
- (D) A registration shall not be deemed complete and the subject discharge shall not be authorized by this general permit unless the registration fee has been paid in full.
- (E) The non-refundable registration fee shall be paid by certified check or money order payable to the Department of Environmental Protection.

## (2) Registration Form

A registration shall be filed on forms prescribed and provided by the commissioner and shall, with respect to each discharge registered on such form, include the following:

- (A) Legal name, address, and telephone number of the registrant. If the registrant is a corporation or a limited partnership transacting business in Connecticut, provide the exact name as registered with the Connecticut Secretary of State.
- (B) Legal name, address, and telephone number of the owner of the site from which the subject discharge takes, or is to take, place.
- (C) Legal name, address, and telephone number of the registrant's attorney or other representative, if applicable.
- (D) Legal name, address, and telephone number of any consultant(s), or engineer retained by the registrant to prepare the registration.
- (E) Location address of the site of the subject discharge.
- (F) The name and water quality classification of the surface water receiving the discharge, the 7Q10 flow of said surface water, and the method of calculating the seven day ten year low flow of the surface water, including but not limited to, identification of the sources(s) of all information used in such calculation.
- (G) The maximum daily flow and number of hours per day of the subject discharge.
- (H) If the subject discharge is an existing discharge, the date it began and the date it is expected to end; if the subject discharge is a new discharge, the date the registrant intends to initiate the discharge and the date it is expected to end.

- (I) A statement whether or not the subject discharge will take place within the coastal boundary, in essential habitat of an endangered or threatened species, or in an aquifer protection area as defined in Section 22a-354h of the General Statutes.
- (J) A statement whether the subject discharge will take place within ½-mile of any public or private drinking water well.
- (K) An indication of whether the site is on the State or Federal Superfund list, National Priority List, listed under CERCLA, has been used for the disposal of hazardous materials, or is subject to the reporting requirements of Sections 22a-6u or 22a-134 of the General Statutes or Public Act 04-134.
- (L) A detailed description of any treatment facility for the subject wastewater, including without limitation a description of flow monitoring equipment or techniques and devices used for the recording total daily flow, and a statement whether any such system will employ air stripping.
- (M) The groundwater classification, pursuant to Section 22a-426 of the General Statutes, of the site where the subject wastewater will be generated.
- (N) A detailed description of any energy dissipation structures to be used in connection with the subject remedial measures.
- (O) A plan of the site where the subject wastewater will be generated, showing at a minimum the legal boundaries of such site, the location of existing and planned recovery, soil venting, and drinking water wells thereon, the location from which the subject discharge leaves the site and, the location from which the subject discharge enters the surface water, the location of all monitoring wells and other places where chemical, physical, or biological monitoring does or will take place, the existing or planned treatment system for the subject wastewater, and the location, if any, of all tidal wetlands and of all inland wetlands and watercourses.
- (P) An 8 ½" x 11" copy of each applicable section of a United States Geological Survey quadrangle map with a scale of 1:24,000, which shows the exact location of each discharge specifying the longitude and latitude of the discharge to within the closest 15 seconds, the location of each treatment facility, and the location of any drinking water wells within ¼-mile of the site where the wastewater is to be generated; each such copy should be marked with the name of such map.
- (Q) The results of a screening analysis conducted pursuant to Sections 4 and 5(a) of this general permit, as documented on a screening form, prescribed and provided by the commissioner.

(R) The following certification, signed by a professional engineer licensed to practice in Connecticut, a certified hazardous materials manager, or a licensed environmental professional:

"I certify that, in my professional judgment, proper operation and maintenance of the treatment facility installed to treat the wastewater which is the subject of this registration will ensure that the discharge of such wastewater meets all effluent limitations and other conditions in the department's General Permit for the Discharge of Groundwater Remediation Wastewater Directly to Surface Water and, if no such treatment facility has been installed, such wastewater will meet all such conditions. This certification is based in part on my review of the results of the screening analysis of such wastewater included with this registration, and on any other laboratory analyses of representative samples of such wastewater, my review of past and current uses of the site at which such wastewater is generated, and on my review of detailed and reliable information about (i) the remedial measures which will generate such wastewater and (ii) any planned treatment facility for such wastewater. I understand that any false statement in this certification is punishable as a criminal offence under Section 53a-157b of the General Statutes and under any other applicable law."

(S) The signature of the registrant and of the individual or individuals responsible for actually preparing the registration, each of whom shall certify in writing as follows:

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief.

I understand that a false statement made in the submitted information may be punishable as a criminal offense, in accordance with Section 22a-6 of the General Statutes, pursuant to Section 53a-157b of the General Statutes, and in accordance with any other applicable statute.

I also certify that this general permit registration is on complete and accurate forms as prescribed by the commissioner without alteration of the text.

I certify that I have read the *General Permit For The Discharge Of Groundwater Remediation Wastewater Directly To A Surface Water* issued by the commissioner of the Department of Environmental Protection; that the discharge which is the subject of this registration is eligible for authorization under such permit; that if such discharge commenced prior to the issuance of such permit, all applicable requirements of such permit are being met; and that a functioning and effective system is in place to assure that all such requirements are met so long as the discharge which is the subject of this registration continues.

I further certify that a copy of this registration has been submitted to all applicable authorities and that such authorities have approved in writing of the subject discharge."

## (d) Where to Submit a Registration

(1) A registration shall be filed at the following address:

CENTRAL PERMIT PROCESSING UNIT DEPARTMENT OF ENVIRONMENTAL PROTECTION 79 ELM STREET HARTFORD, CT 06107-5127

- (2) One additional copy of the completed registration form shall be submitted along with the original at the address specified in subsection (d)(1) of this section, for each of the following conditions:
  - (A) For any discharge of groundwater remediation wastewater where drinking water wells exist within one-quarter mile of the proposed site;
  - (B) For any discharge of groundwater remediation wastewater where air stripping is used as a wastewater treatment.

## (e) Additional Information

The commissioner may require a registrant to submit additional information which the commissioner deems reasonably necessary to evaluate whether the subject discharge is consistent with the criteria for authorization under this general permit.

#### (f) Action by Commissioner

- (1) The commissioner may reject a registration without prejudice if he determines that it does not satisfy the requirements of subsection (c) of this section or more than 30 days have elapsed since he requested that the registrant submit additional information or the required registration fee and the registrant has not submitted such fee. Any registration refiled after such a rejection shall be accompanied by the registration fee specified in Section 4(c)(1) of this general permit.
- (2) The commissioner may disapprove a registration if he finds that the subject discharge is inconsistent with the criteria for authorization under this general permit, or for any other reason provided by law.
- (3) Disapproval of a registration under this section shall constitute notice to the registrant that the subject discharge may not lawfully be initiated or maintained without the issuance of an individual permit under Section 22a-430 of the General Statutes.
- (4) The commissioner may approve a registration with reasonable conditions. If the commissioner approves a registration with conditions, the permittee shall be bound by such conditions as if they were a part of this general permit.

(5) Rejection, disapproval, or approval of a registration shall be in writing.

#### Section 5. Conditions of this General Permit

The permittee shall at all times continue to meet the requirements for authorization set forth in Section 3 of this general permit. In addition, the permittee shall assure that authorized activities are conducted in accordance with the following conditions:

## (a) Screening Analysis Requirements

## (1) Frequency

## (A) Initial Screening Analysis

Except as noted in subsection (4) of this section, for any or all proposed discharges of groundwater remediation wastewater, an initial screening analysis shall be conducted prior to registering for authorization under this general permit and results shall be submitted on forms prescribed and provided by the commissioner with the registration form per Section 4(c)(2)(Q) of this general permit.

If the authorized discharge is the result of an emergency response, unexpected release, or underground storage tank release, the Initial Screening Analysis shall be submitted within 30 days of submittal of a registration.

## (B) Ongoing Screening Analysis

After registering, and for the duration of authorization under this general permit, the registrant shall conduct ongoing screening analysis. Analysis shall be recorded on forms prescribed and provided by the commissioner, submitted in accordance with Section 5(e) of this general permit, and be maintained on site or be readily available by the permittee. Ongoing screening analysis shall be conducted in accordance with the following schedule based on discharge volume:

Maximum Daily Flow Ongoing Screening Frequency
Less than 5,000 gallons per day annually
5,000 gallons per day or more twice per year

## (2) Protocols

All screening analysis, initial and ongoing, required by this general permit shall conform to the following:

- (A) Samples of untreated wastewater shall be analyzed to determine the concentration or level therein of:
  - (i) Total volatile organic compounds, as determined by use of EPA method 624, or equivalent methodology approved pursuant to 40 CFR 136;
  - (ii) Total petroleum hydrocarbon analysis;

- (iii) Methyl tertiary-butyl ether, as determined by use of EPA method 624, or equivalent methodology approved pursuant to 40 CFR 136;
- (iv) Total copper, total lead, total mercury, total zinc, total iron and total cadmium:
- (v) pH;
- (vi) Temperature;
- (vii) Total settleable solids; and
- (viii) Total suspended solids.
- (B) If wastewater to be discharged is reasonably expected to be impacted by petroleum compounds, other than gasoline, samples of untreated wastewater shall be analyzed for Polynuclear Aromatic Hydrocarbons (PAHs).
- (C) If wastewater to be discharged is reasonably expected to be impacted by gasoline, the samples of untreated wastewater shall be analyzed for gasoline oxygenates, including TBA, MTBE, TAME, MTEE, and related compounds known to be used in the gasoline released. Analysis shall be by EPA Method 624, or other methodology approved pursuant to 40 CFR 136.
- (D) If any pollutant listed in:
  - (i) Appendix B, Tables II, III, IV, or V of Section 22a-430-4 of the Regulations of Connecticut State Agencies;
  - (ii) Appendix D of Section 22a-430-4 of the Regulations of Connecticut State Agencies; or
  - (iii) Title 10 of the CFR,

is reasonably known to have been handled, stored, released, or disposed of at or adjacent to the site where the subject wastewater originates, the subject wastewater shall also be analyzed to determine the concentration of such pollutant.

- (E) If any pollutant,
  - (i) other than one specified in subsections (2)(A), (B), (C) or (D) of this section which may be toxic, hazardous, or detrimental to any use of the watercourse designated pursuant to Connecticut's Water Quality Standards into which such wastewater is or will be discharged; or
  - (ii) having the potential to bioaccumulate, bioconcentrate, or adversely affect aquatic life

is reasonably known to have been handled, stored, released, or disposed of at or adjacent to the site where the subject wastewater originates, the subject wastewater shall also be analyzed to determine the concentration of each such pollutant.

#### (3) Procedures

- (A) Each wastewater sample shall be:
  - (i) representative of the untreated wastewater;
  - (ii) a grab sample; and
  - (iii) collected, preserved, handled, and analyzed using methods approved in accordance with 40 CFR 136 which are capable of achieving quantification levels below the level established as an effluent limitation in Section 5(d) and Attachment A of this general permit and limits specified in an Approval of Registration issued pursuant to Section 3 of this general permit.

## (4) Reporting

The results of all screening analyses shall be documented on screening forms prescribed and provided by the commissioner and submitted pursuant to the requirements of Section 5(e) of this general permit.

## (b) Monitoring Requirements

- (1) All discharges shall be monitored in accordance with the following:
  - (A) The permittee shall monitor the discharge for any pollutant that in the screening analysis conducted pursuant to Section 5(a) of this general permit or any other analysis identifies the presence of such pollutant in the groundwater at levels above either the limitations specified in Attachment A or Section 5(d) of this general permit or the limitations or conditions specified in an Approval of Registration issued pursuant to Section 3 of this general permit.
  - (B) The permittee shall monitor the discharges for the presence of VOCs if the source of contamination includes VOCs, or any screening analysis conducted pursuant to Section 5(a) of this general permit indicates the presence of any VOCs at or above quantification levels. Analysis shall be conducted using EPA Method 624, or other methodology approved pursuant to 40 CFR 136, capable of quantifying pollutant levels below the limits set in this general permit. Tentatively identified compounds detected in the screening analysis required pursuant to Section 5(a) of this general permit shall be analyzed as target compounds if such compounds compose greater than 10% of the total pollutant load for VOCs, or if treatment technology is not proven to be as effective for the TICs detected as for target VOCs of concern.

- (C) The permittee shall monitor the discharges for total petroleum hydrocarbons if:
  - (i) the results of any analysis of the discharges indicates that total petroleum hydrocarbons is present in the groundwater above the limit identified in Attachment A of this general permit (5.0 mg/l);
  - (ii) oil or an oily sheen is visible in the water to be discharged; or
  - (iii) the source of the contamination being remediated is petroleum oil. Analysis shall be performed using methods approved in accordance with 40 CFR 136 which are capable of achieving quantification levels below the limit of 5.0 mg/l.
- (D) All discharges generated during construction dewatering, except well point dewatering, shall be monitored for Total Suspended Solids, and Total Settleable Solids.
- (E) The permittee shall monitor the discharges for any metal if:
  - (i) any analysis indicates that metal is present in the groundwater at concentrations greater than the limit listed in Attachment A;
  - (ii) the site has been historically or is presently used to dispose of or store that metal; or
  - (iii) the permittee has reason to believe that concentrations of the metal in groundwater may exceed the limits in Attachment A, either from natural sources or as a result of on-site activities.
- (F) The registrant shall monitor the discharge as required by any Approval of Registration issued pursuant to Section 3 of this general permit.
- (G) Monitoring for aquatic toxicity shall be conducted and reported pursuant to the requirements of Section 5(b)(6) of this general permit.
- (H) Monitoring for flow shall be performed according to the schedule in Section 5(b)(3) of this general permit. All discharges of greater than 5000 gallons per day, shall have flow monitoring equipment installed, or implement techniques and devices capable of recording total daily flow. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. All other discharges shall implement flow-measuring procedures to adequately estimate flows.
- (I) All discharges shall be monitored in accordance with the ongoing Screening Analysis pursuant to Section 5(a)(1)(B) of this general permit.

(J) Monitoring and reporting of radioactive liquid releases shall be performed in accordance with an approval of registration issued pursuant to Section 3(b)(1)(B)(iii) of this general permit *and* with the applicable 10 CFR 50.36a "Technical specifications on effluents from nuclear power reactors" plus 10 CFR 20 Appendix B "Standards for Protection Against Radiation" and 40 CFR 190, "Environmental Radiation Protection Standards For Nuclear Power Operations". Annual monitoring reports shall be submitted to the Federal Nuclear Regulatory Commission and the Connecticut Department of Environmental Protection, Bureau of Air Management, Radiation Control Division.

## (2) Monitoring Location

- (A) Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. Samples shall be taken at the monitoring points identified pursuant to Section 4(c)(2)(O) of this general permit before the effluent joins or is diluted by any other waste stream, or substance.
- (B) For any site with more than one discharge point to the surface water, or with multiple discharge points to a non-dedicated discharge line, individual samples shall be collected from each discharge. Samples shall be designated as DSN 101, DSN 102, etc.

## (3) Monitoring Frequency

Monitoring to verify compliance with the effluent limitations in Section 5(d) and Attachment A of this general permit and any Approval of Registration issued pursuant to Section 3 of this general permit shall be performed according to the following schedule:

(A) For all discharges, except as specified in Section 5(b)(3)(D) of this general permit, for each initiation of a discharge, the discharge shall be sampled on the first day of discharge and then every other day for the first two weeks, weekly for the next month, and then as follows depending upon the maximum daily flow and available dilution:

Maximum Daily Flow Effluent Monitoring Frequency (gallons per day)

Less than 5,000, with available quarterly dilution of greater than 100:1

5,000 or more, and all other monthly discharges

(B) For each initiation or restart of a discharge after an exceedance of an effluent limitation, the discharge shall be sampled on the first day of discharge and then every other day for the first week, weekly for the next month, and then in accordance with the sampling schedule at the time the discharge was ceased.

- (C) For each restart of a discharge for any reason other than an exceedance of a parameter limit, the discharge shall be sampled on the first day of discharge and then in accordance with the sampling schedule at the time the discharge was ceased.
- (D) For intermittent discharges of groundwater remediation wastewaters generated from scheduled remediation activities conducted at sites with no other discharges of wastewater subject to this general permit, the following monitoring shall be required:
  - (i) A minimum of one representative sample shall be collected and analyzed in accordance with Section 5(a)(2) and 5(a)(3) of this general permit for each discharge.
  - (ii) If multiple points are sampled independently, a volume-proportioned average of analytical results may be substituted for a single sample.
  - (iii) Treatment and discharge shall be conducted as described in Section 5(c) of this general permit.
- (E) Monitoring frequency for aquatic toxicity shall be conducted and reported per the requirements of Section 5(b)(6) of this general permit.

## (4) Wastewater Sampling

Samples taken for purposes of determining compliance with all effluent limitations and monitoring requirements listed in this general permit shall be grab samples. All sample analyses which are required by this general permit and all reporting of such analyses, shall be done by a laboratory certified by the Connecticut Department of Public Health. Chemical analysis shall be performed using methods approved in accordance with 40 CFR 136 which are capable of achieving quantification levels below the level established as an effluent limitation in Section 5(d) and Attachment A of this general permit and limits specified in an Approval of Registration issued pursuant to Section 3 of this general permit. Toxicity monitoring shall be conducted pursuant to the requirements of Section 5(b)(6) of this general permit.

## (5) Operations and Maintenance

The permittee shall periodically calibrate and perform maintenance on all monitoring and field equipment used to monitor the pollutants discharged under this general permit, at intervals that will ensure the accuracy of measurements.

#### (6) Aquatic Toxicity Monitoring

All discharges of Groundwater Remediation Wastewater to a surface water, except intermittent discharges, with a duration of greater than 90 days shall be monitored for aquatic toxicity in accordance with the following:

(A) For discharges exceeding 25,000 gallons per day, monitoring for toxicity shall be conducted quarterly during the months of March, June, September, and December.

For discharges with flows of less than 25,000 gallons per day, monitoring for aquatic toxicity shall be conducted twice per year in the months of March and September.

Samples collected for determination of aquatic toxicity shall be tested using the NOAEL protocol specified in Section 22a-430-3(j)(7)(A) of the Regulations of Connecticut State Agencies, except that samples shall not be dechlorinated, filtered, or modified in any way unless specifically approved in writing by the Commissioner.

- (B) Toxicity tests shall be initiated within 24 hours of sample collection, except that tests on samples with salinity greater than 5 ppt shall be commenced within 36 hours of sample collection, of sample collection, and shall be forty-eight hours in duration.
- (C) For salinity less than 5 ppt toxicity tests shall employ neonatal (less than 24 hours old) *Daphnia pulex* and juvenile (1-14 days old, with no greater than a 24 hour range in age) *Pimephales promelas* as test organisms. For salinity greater than or equal to 5 ppt toxicity tests shall utilize neonatal (1-5 days old with no more than 24-hours range in age) *Mysidopsis bahia* and juvenile (9-14 days old, with no greater than a 24 hour range in age) *Menidia beryllina* as test organisms.
- (D) All samples collected for determination of aquatic toxicity shall be analyzed for chemical parameters as follows:

Pollutant Parameters	Required Quantification Level
Copper, Total Recoverable	0.005 mg/l
Lead, Total Recoverable	0.005 mg/l
Iron, Total Recoverable	0.1 mg/l
Total Residual Chlorine	0.020 mg/l
Temperature	°F
Zinc, Total Recoverable	0.020 mg/l
Salinity	parts per thousand (ppt)
Appearance	
Hardness	
рH	+/- 0.10 Standard Unit
VOCs	

(E) If any toxicity test indicates that either of the conditions listed in Section 5(b)(6)(E)(i) or (ii) has occurred, DEP shall be notified as specified in Section 5(f)(1) of this general permit and another sample of the discharge shall be collected and tested as described above within 30 days of the previous sample date. If three toxicity tests in any consecutive 12 month period indicate that the conditions listed in Section 5(b)(6)(E)(i) has

occurred, the discharge shall cease as specified in Section 5(f)(2) of this general permit.

- (i) The survival of the test organisms was less than ninety (90) percent in the *average* of the test chambers containing undiluted effluent.
- (ii) The *survival* of test organisms was less than ninety (90) percent in each replicate control test chamber or test conditions were not achieved as specified in Section 22a-430-3(j)(7)(A) of the Regulations of Connecticut State Agencies, such as maintenance of appropriate environmental controls (invalid test).

## (7) Reporting

The results of all monitoring (including aquatic toxicity) shall be documented on forms prescribed and provided by the commissioner and submitted pursuant to the requirements of Sections 5(e) and 5(f) of this general permit.

## (c) Treatment and Inspection Requirements

- (1) The permittee shall treat the discharge for any pollutant that in the screening analysis conducted pursuant to Section 5(a) of this general permit or any other analysis identifies the presence of such pollutant in the groundwater at levels above either the limitations specified in Attachment A or Section 5(d) of this general permit or the limitations specified in an Approval of Registration issued pursuant to Section 3 of this general permit. Treatment requirements for VOCs, total petroleum hydrocarbons, total suspended solids and total settleable solids shall be determined as follows:
  - (A) To determine treatment requirements for VOCs, the permittee shall add the individual concentrations of all compounds detected in any single sample analyzed using these methods. If the sum of those compounds and TICs detected in any one sample exceeds the limitations in Attachment A of this general permit, the permittee shall treat the discharges for the removal of VOCs.
  - (B) The permittee shall treat the discharges for the removal of total petroleum hydrocarbons if:
    - (i) the results of any analysis of the discharges indicates that total petroleum hydrocarbons is present in the groundwater above the limit identified in Attachment A of this general permit (5.0 mg/l);
    - (ii) oil or an oily sheen is visible in the water to be discharged; or
    - (iii) the source of the contamination being remediated is petroleum oil.
  - (C) All discharges generated during construction dewatering, except well point dewatering, shall be treated for the removal of Total Suspended Solids and Total Settleable Solids.

- (2) Regardless of the concentration at the discharge point, if the discharge authorized herein is generated from multiple groundwater sources or wells that when combined do not have pollutant level(s) that exceed either the limitations specified in Attachment A or Section 5(d) of this general permit, or the limitations specified in an Approval of Registration issued pursuant to Section 3 of this general, treatment shall still be installed for any such parameter if a screening analysis conducted pursuant to Section 5(a) of this general permit or any other analysis identifies that any of the following conditions exist:
  - (A) Any single source or well has pollutant(s) levels that exceed any limitation, by more than 3 times.
  - (B) Any single source or well with pollutant levels (excluding pH) exceeding any limitation comprises 50% or more of the total flow at any time.
  - (C) The source(s) or well(s) of groundwater with pollutant levels below limitations is intermittent, seasonal, or otherwise not known to be reliably present at required volume during all periods of discharge.
  - (D) The withdrawal of groundwater from source(s) or well(s) of groundwater with pollutant levels below limitations is not required to; control pollutant migration, maintain a cone of depression necessary for remedial activities, or otherwise maintain effective remediation activities.
  - (E) The withdrawal of groundwater from source(s) or well(s) of groundwater with concentrations below limitations is solely for the purpose of dilution of other pollutant sources to comply with the limitations of Attachment A and/or Section 5(d) of this general permit and/or specified in the Approval of Registration issued pursuant to Section 3 of this general permit.
    - Should treatment be indicated by this section, such treatment shall treat either specific source(s) or well(s), or all wastewaters to be discharged.
- (3) Treatment systems implemented shall incorporate best management practices and accepted technologies for the reduction of all pollutants to below the levels specified in Attachment A and/or Section 5(d) of this general permit and/or specified in the Approval of Registration issued pursuant to Section 3 of this general permit.
- (4) Treatment systems shall be inspected and maintained at regularly scheduled intervals as determined by manufacturer specifications, site specific conditions and best professional judgment. The discharge shall cease if the treatment system is not operating as necessary to maintain compliance with all effluent limitations.

#### (d) Effluent Limitations

(1) The effluent limitations specified in Attachment A and/or this section of this general permit and/or specified in the Approval of Registration issued pursuant to Section 3 of this general permit, shall not be exceeded at any time as determined by a grab sample.

If the quantification level(s) for an analytical methodology approved by 40 CFR 136 is higher than the effluent limitation(s) specified, the effluent limitation(s) shall be considered to be below quantification level(s).

- (2) The pH of the discharges shall not be less than 6.0 nor greater than 8.5 standard units at any time.
- (3) The maximum daily flow shall not exceed the maximum daily flow specified in the general permit Registration.
- (4) Total Suspended Solids concentrations shall not exceed 30 mg/l. Total Suspended Solids concentrations of greater than 30 mg/l shall be reported and corrected per the conditions of Section 5(f)(1) of this general permit. Total Suspended Solids concentrations of greater than 30 mg/l are not subject to the requirements of Section 5(f)(2) or 5(f)(3) of this general permit.
- (5) For sites within the influence of naturally saline waters, where such waters are known or presumed to compose all or part of the ground waters to be pumped, and the discharge is to be directed to such naturally saline water, the limitation for naturally occurring saline water ions shall be 1.5 times the naturally occurring concentration for such ions provided:
  - (A) Groundwater on-site is not known or presumed to be contaminated by such ions as the result of activities that have or are currently occurring at the site,
  - (B) Background concentrations for such ions have been verified by monitoring of the surface water beyond any area influenced by the subject site,
  - (C) The ion does not cause or contribute to a violation of the toxicity requirements of this general permit, and
  - (D) Monitoring for such ions is conducted in the surface water at least once per year with analysis being submitted with the reporting required pursuant to Section 5(e) of this general permit.

## (e) Reporting and Record Keeping Requirements

(1) The permittee shall submit annually, during the month of October, the results of all toxicity tests, all discharge monitoring reports, and all untreated water screening results required pursuant to Sections 5(a) and 5(b) of this general permit, and all violation reports submitted pursuant to Section 5(f) of this general permit that were conducted during the prior twelve months. Discharge monitoring results, untreated water screening results and aquatic toxicity results shall be submitted on forms provided by the commissioner.

The results of toxicity tests shall include all information necessary to verify the validity of aquatic toxicity test procedures, including but not limited to records of organisms mortality and environmental conditions noted during the tests.

All results shall be submitted to:

AQUATIC TOXICITY SECTION BUREAU OF WATER MANAGEMENT DEPARTMENT OF ENVIRONMENTAL PROTECTION 79 ELM STREET HARTFORD, CT 06106-5127

- (2) Except as otherwise specified in writing by the commissioner, each analytical result of a wastewater sample taken and all data generated by any other monitoring conducted under this general permit shall be retained at the subject site for at least five years from the date such result or data was generated or received by the permittee, whichever is later. The commissioner may specify a longer retention period as he reasonably deems necessary upon written notice to the permittee stating the reasons for such longer period. If during the retention period required by this subdivision the commissioner, under chapter 446k of the General Statutes, issues an order or commences a civil action against the permittee, such retention period shall be extended as necessary until such order or action is finally disposed of.
- (3) The permittee shall make any such result or data available to the commissioner upon request.
- (4) Within 14 days of termination of discharge, the Permittee shall notify DEP of the date of termination of discharge on a form provided by the commissioner.
- (5) In addition to the reporting requirement specified in subsection (e)(1) of this section, the permittee shall submit reports as required by any Approval of Registration issued pursuant to Section 3 of this general permit.

## (f) Duty to Correct, Record, and Report Violations

If monitoring data or any other information indicates that a violation of an effluent limitation or any other condition of this general permit has occurred, the permittee shall immediately take all reasonable action to determine the cause of such violation, correct such violation and mitigate its results, prevent further such violation, and report in writing such violation and such corrective action to the commissioner.

(1) Within 2 hours of learning of or having reason to believe that an authorized discharge has exceeded any limit specified herein, or if re-sampling for toxicity is required pursuant to Section 5(b)(6)(E) of this general permit, the permittee shall notify the commissioner. If such notification is given by telephone, written or electronic notification shall also be delivered to the commissioner within 24 hours of telephone notification. Electronic notification shall be directed to dep.ggrviolationreport@po.state.ct.us. Written notification shall be delivered to the commissioner at the following address:

COMPLIANCE SECTION
BUREAU OF WATER MANAGEMENT/PED
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

Such written or electronic notice shall include the following information:

- (A) The permit conditions(s) or effluent limitation(s) violated;
- (B) The analytical results or other information demonstrating such violation(s); if there are analytical results, a copy thereof shall be retained with the log;
- (C) The cause of the violation(s), if known;
- (D) The daily flow of the discharge at the time of the violation;
- (E) Dates and times during which the violation continued;
- (F) If the violation was not corrected immediately upon being discovered, the anticipated time it is expected to continue; and upon correction, the date and time of correction;
- (G) Steps taken and planned to reduce, eliminate and prevent a reoccurrence of the violation, and the dates such steps have been or will be executed; and
- (H) The name, title and signature of the individual recording the information and the date and time of such recording.
- (2) The discharge shall cease immediately if:
  - (A) an authorized discharge has exceeded any limit specified herein by more than 2 times;
  - (B) the pH is less than 5.0 or greater than 9.5 standard units;
  - (C) if any violation is not corrected within 7 days;
  - (D) if the violation results in a toxic impact on aquatic life or threat to human health; or
  - (E) if the discharge is required to cease as specified in Section 5(b)(6)(E) of this general permit. Otherwise, within 48 hours of submitting notification to the commissioner that an exceedance of any limit has occurred, the discharge shall cease, unless otherwise directed by the commissioner either in writing, or electronically.
- (3) If analysis of a single sample shows three or more violations of any of the requirements of this general permit, or cumulatively three or more such violations are shown by successive sampling events, or four or more such violations occur during any calendar year, or if the discharge is required to cease as specified in Section 5(b)(6)(E) of this general permit, within 60 days of this determination the permittee shall deliver to the commissioner, at the address specified in subdivision (1) of this subsection, a written report prepared by a certified hazardous materials manager, licensed environmental professional, or a professional engineer licensed to practice in Connecticut. Such report shall

describe in detail all actions which have been taken with respect to the subject discharge and/or subject site to prevent any further violations of this general permit. Such report shall include the following certification by such manager or engineer:

"I certify that in my professional judgement the discharge which is the subject of this report, as well as any other authorized discharges generated at the subject site, comply with all effluent limitations and other conditions of the general permit for the Discharge of Groundwater Remediation Wastewater to a Surface Water, and that proper operation and maintenance of any equipment or system to treat each discharge will ensure that all such conditions are met or, if there is no such equipment or system, each such discharge will meet all such conditions without treatment. This certification is based in part on my review of chemical analyses of at least three grab samples collected, handled, and analyzed in accordance with 40 CFR 136, which samples were representative of such discharge during routine operating conditions and were taken at least one week apart following the implementation of measures to correct any violations of the requirements of this general permit. I understand that a false statement made in this report, including all attachments thereto, or in this certification may, pursuant to Section 22a-6 of the General Statutes, be punishable as a criminal offense under Section 53a-157b of the General Statutes, and may also be punishable under Section 22a-438 of the General Statutes and any other applicable law."

(4) If at any time a discharge ceases pursuant to subsection (f)(2) of this section, such discharge shall not restart without specific written approval from the commissioner.

#### (g) Erosion and Sediment Controls

If authorized activities create a potential for pollution due to the erosion of soil, erosion and sediment control measures shall be installed and maintained in compliance with the standards set forth in the "2002 Connecticut Guidelines for Soil Erosion and Sediment Control" as revised, established pursuant to Section 22a-328 of the Connecticut General Statutes.

- (1) During the construction of any dewatering facility associated with the discharge erosion and sediment control measures shall be installed and maintained to ensure that erosion of disturbed soils and discharge of eroded sediments to tidal wetlands, inland wetland and watercourses is minimized or eliminated.
- (2) During discharge operations erosion and sediment control measures shall be installed and maintained to ensure that discharge energies are sufficiently dissipated to prevent the erosion of soil and the discharge of eroded sediments to tidal wetlands, inland wetland and watercourses is prevented.

#### (h) Regulations of Connecticut State Agencies Incorporated into this General Permit

The permittee shall comply with all applicable law, including without limitation the following Regulations of Connecticut State Agencies, which are hereby incorporated into this general permit as if fully set forth herein:

## (1) Section 22a-430-3:

Subsection (b) General - subparagraph (1)(D) and subdivisions (2), (3), (4) and (5)

Subsection (c) Inspection and Entry

Subsection (d) Effect of a Permit - subdivisions (1) and (4)

Subsection (e) Duty to Comply

Subsection (f) Proper Operation and Maintenance

Subsection (g) Sludge Disposal

Subsection (h) Duty to Mitigate

Subsection (i) Facility Modifications, Notification - subdivisions (1) and (4)

Subsection (j) Monitoring, Records and Reporting Requirements - subsections (1), (6), (7), (8), (9) and (11) [except subparagraphs (9)(A)(2), and (9)(C)]

Subsection (k) Bypass

Subsection (m) Effluent Limitation Violations

Subsection (n) Enforcement

Subsection (o) Resource Conservation

Subsection (p) Spill Prevention and Control

Subsection (q) Instrumentation, Alarms, Flow Recorders

Subsection (r) Equalization

#### (2) Section 22a-430-4:

Subsection (t) - Prohibitions

Subsection (p) - Revocation, Denial, Modification

Appendices

## (i) Reliance on Registration

In evaluating the permittee's registration, the commissioner has relied on information provided by the permittee. If such information proves to be false or incomplete, the permittee's authorization to discharge under this general permit may be suspended or revoked in accordance with law, and the commissioner may take any other legal action provided by law.

#### (j) Duty to Provide Information

If the commissioner requests any information pertinent to the authorized discharge or to compliance with this general permit or with the permittees registration or approval of registration under this general permit, the permittee shall provide such information within 30 days of such request. Such information shall be filed in accordance with the "Certification of Documents" requirements prescribed in subsection (k) of this section.

#### (k) Certification of Documents

Any document, including but not limited to any notice, information or report, which is submitted to the commissioner under this general permit shall be signed by the permittee or by a duly authorized representative of the permittee in accordance with Section 22a-430-3(b)(2)(A) of the Regulations of Connecticut State Agencies, and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows:

'I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the General Statutes, pursuant to Section 53a-157b of the General Statutes, and in accordance with any other applicable statute."

## (l) Date of Filing

For purposes of this general permit, the date of filing with the commissioner of any document is the date such document is received by the commissioner. The word "day" as used in this general permit means the calendar day; if any date specified in the general permit falls on a Saturday, Sunday, or legal holiday, such deadline shall be the next business day thereafter.

#### (m) False Statements

Any false statement in any information submitted pursuant to this general permit may be punishable as a criminal offense, in accordance with Section 22a-6, under Section 53a-157b of the General Statutes.

## (n) Correction of Inaccuracies

Within fifteen days after the date a permittee becomes aware of a change in any information in any material submitted pursuant to this general permit, or becomes aware that any such information is inaccurate or misleading or that any relevant information has been omitted, such permittee shall correct the inaccurate or misleading information or supply the omitted information in writing to the commissioner. Such information shall be filed in accordance with the certification requirements prescribed in subsection (k) of this section.

## (o) Transfer of Authorization

An authorization under this general permit is transferable only in accordance with the provisions of Section 22a-60 of the General Statutes.

## (p) Other Applicable Law

Nothing in this general permit shall relieve the permittee of the obligation to comply with any other applicable federal, state and local law, including but not limited to the obligation to obtain any other authorizations required by such law.

## (q) Other Rights

This general permit is subject to and does not derogate any present or future rights or powers of the State of Connecticut and conveys no rights in real or personal property nor any exclusive privileges, and is subject to all public and private rights and to any federal, state, and local laws pertinent to the property or activity affected by such general permit. In conducting any activity authorized hereunder, the permittee may not cause pollution, impairment, or destruction of the air, water, or other natural

resources of this state. The issuance of this general permit shall not create any presumption that this general permit should or will be renewed.

## Section 6. Commissioner's Powers

## (a) Abatement of Violations

The commissioner may take any action provided by law to abate a violation of this general permit, including the commencement of proceedings to collect penalties for such violation. The commissioner may, by summary proceedings or otherwise and for any reason provided by law, including violation of this general permit, revoke a permittee's authorization hereunder in accordance with Sections 22a-3a-2 through 22a-3a-6, inclusive, of the Regulations of Connecticut State Agencies. Nothing herein shall be construed to affect any remedy available to the commissioner by law.

## (b) General Permit Revocation, Suspension, or Modification

The commissioner may, for any reason provided by law, by summary proceedings or otherwise, revoke or suspend this general permit or modify it to establish any appropriate conditions, schedules of compliance, or other provisions which may be necessary to protect human health or the environment.

## (c) Filing of an Individual Application

If the commissioner notifies a permittee in writing that such permittee must obtain an individual permit if he wishes to continue lawfully conducting the discharge authorized by this general permit, the permittee may continue conducting such discharge only if he files an application for an individual permit within 30 days of receiving the commissioner's notice. While such application is pending before the commissioner, the permittee shall comply with the terms and conditions of this general permit and any approval of registration. Nothing herein shall affect the commissioner's power to revoke a permittee's authorization under this general permit at any time.

Issued Date:	sued Date: February 9, 2005		GINA McCARTHY	
		•	Commissioner	

This is a true and accurate copy of the general permit executed on February 9, 2005 by the Commissioner of the Department of Environmental Protection.

# Attachment A: Toxic and Hazardous Pollutants and Their Maximum Concentrations

All methodologies shall be approved in accordance with Title 40 Part 136 of the Code of Federal Regulations (40 CFR 136) and shall be capable of quantifying pollutant levels below the limits specified in Section 5(d) and this Attachment of this general permit and limits specified in an Approval of Registration issued pursuant to Section 3 of this general permit.

## **Volatile Organic Compounds**

Combined Total of All Individual Compounds Shall Not Exceed 10 µg/l for all Discharges to Receiving Waters with a Water Quality Classification or Goal of A or SA

Combined Total of All Individual Compounds Shall Not Exceed 50  $\mu$ g/l, **and** 1,1,2 Trichloroethane shall not exceed 42  $\mu$ g/l for all Discharges to Receiving Waters with a Water Quality Classification or Goal of B or SB

MTBE Shall Not Exceed 70 µg/l

## **Total Petroleum Hydrocarbons**

The Total Petroleum Hydrocarbons Shall Not Exceed 5.0 mg/l

#### Solids

Total Suspended or Settleable Solids – No Limit

## **Phthalate Esters**

Phthalate Ester	Maximum Concentration
Bis(2-ethylhexyl)phthalate	
Benzyl butyl phthalate	Bis(2-ethylhexyl)phthalate 5.9 µg/l
Di-n-butyl phthalate	Combined Total of All Phthalates Shall
Diethyl phthalate	Not Exceed 100 μg/l
Dimethyl phthalate	
Di-n-octyl phthalate	

## **Base Neutral and Acid Extractables (BNA)**

The Combined Total of All BNAs, Including Tentatively Identified Compounds, but Excluding Phenols\* and PAHs\* Shall Not Exceed 10.0  $\mu$ g/l.

\* Excluded Compounds Referenced Below

In addition, the following compounds shall not exceed:

BNA's (Excludes Phenol and PAHs)	Maximum Concentration (μg/l)
Benzidine	0.00054 μg/l
3,3 dichlorobenzidine	0.077 μg/l
Hexachlorobenzene	0.00077 μg/l

## **Phenols**

Phenol	Maximum Concentration
2-sec-Butyl-4, 6-dinitrophenol (DNBP)	
4-Chloro-3-methylphenol	
2-Chlorophenol	
Cresols (methyl phenols)	
2-Cyclohexyl-4, 6-dinitrophenol	
2,4-Dichlorophenol	
2,6-Dichlorophenol	
2,4-Dimethylphenol	Combined Total of All Phenols
2,4-Dinitrophenol	Shall Not Exceed 5.0 µg/l
2-Methyl-4, 6-dinitrophenol	
2-Nitrophenol	
4-Nitrophenol	
Pentachlorophenol	
Phenol	
Tetrachlorophenols	
Trichlorophenols	
2,4,6-Trichlorophenol	

## Polynuclear Aromatic Hydrocarbons (PAHs)

The Combined Total of All PAHs Shall Not Exceed 5.0  $\mu$ g/l and the Specified Concentration Shall Not Be Exceeded.

PAH	Maximum Concentration
Acenaphthene	
Acenaphthylene	
Anthracene	
Benzo(a)anthracene	0.49 μg/l
Benzo(a)pyrene	0.49 μg/l
Benzo(b)fluoranthene	
Benzo(j)fluoranthene	
Benzo(k)fluoranthene	0.49 μg/l
Benzo(ghi)perylene	
Chrysene	
Dibenzo(a,h)acridine	
Dibenzo(a,j)acridine	
Dibenzo(a,h)anthracene	0.01 μg/l
H-Dibenzo(c,g)carbazole	
Dibenzo(a,e)pyrene	
Dibenzo(a,h)pyrene	
Dibenzo(a,i)pyrene	
Fluoranthene	
Fluorene	
Indeno(1,2,3-cd)pyrene	0.49 μg/l
3-Methylcholanthrene	
Naphthalene	
Phenanthrene	
Pyrene	

## **Organochlorine Pesticides**

(For any maximum concentration that is below the method detection limit of the approved methodology, the maximum concentration shall be "below method detection")

Pesticide	Maximum Concentration (µg/l)
Aldrin	0.00014 μg/l
Alpha-BHC	0.013 μg/l
Beta-BHC	0.046 μg/l
Delta-BHC	1.0 μg/l
Gamma-BHC (Lindane)	0.06 μg/l
Chlordane (technical)	0.0022 μg/l
4,4'-DDD	0.00084 μg/l
4,4'-DDE	0.00059 μg/l
4,4'-DDT	0.00059 μg/l
Dieldrin	0.0042 μg/l
Endosulfan I	0.456 μg/l
Endosulfan II	0.456 μg/l
Endosulfan sulfate	0.50 μg/l
Endrin	0.002 μg/l
Endrin aldehyde	1.0 μg/l
Heptachlor	0.0063 μg/l
Heptachlor epoxide	0.003 μg/l

## **Chlorinated Herbicides**

Herbicide	Maximum Concentration	
2,4,-D	Combined Total of 2,4-D plus 2,4-DB Shall Not Exceed 70 µg/l	
2,4-DB		
2,4,5-T	1.0 μg/l	
2,4,5-TP (Silvex)	1.0 μg/l	
Dicamba	1.0 μg/l	

## **PCBs**

РСВ	Maximum Concentration
PCB-1016	
PCB-1221	
PCB-1232	Combined Total of All PCBs Shall Not
PCB-1242	Exceed 0.1 μg/l and no individual
PCB-1248	compound shall exceed 0.00017 µg/l
PCB-1254	
PCB-1260	
OTHER PCB's	

If other PCBs have been used or stored on-site or there is reason to believe they may be present, analyze each compound (congener) in addition to the seven listed PCB mixtures.

Metals analysis shall be conducted using methodologies approved in accordance with 40 CFR 136 which, whenever possible are capable of achieving limits of detection below the levels established below.

Metals	Maximum Concentration		
	10 to 1 Dilution	100 to 1 Dilution	
Arsenic	0.021 μg/l	0.021 μg/l	
Beryllium	2.6 µg/l	24.8 µg/l	
Cadmium	10.0 μg/l	95.9 μg/l	
Chromium	342 μg/l	1000 µg/l	
Copper	48 µg/l	480 μg/l	
Lead	9.8 µg/l	93.6 μg/l	
Hexavalent Chromium	79.4 μg/l	79.4 μg/l	

Metals	Maximum Concentration		
	10 to 1 Dilution	100 to 1 Dilution	
Mercury	1.0 µg/l	9.7 μg/l	
Nickel	235 μg/l	1000 μg/l	
Selenium	40 μg/l	390 μg/l	
Silver	5.0 μg/l	48 μg/l	
Zinc	322 µg/l	1000 μg/l	

#### Other Substances:

All analysis shall be conducted using methodologies approved in accordance with 40 CFR 136 which are capable of achieving limits of detection below the levels established below:

Pollutant	Maximum Concentration	
	10 to 1 Dilution	100 to 1 Dilution
Ammonia	1.5 mg/l	1.5 mg/l
Chlorine	0.9 mg/l	0.8 mg/l
Cyanide	43 µg/l	406 μg/l
Amenable Cyanide	43 µg/l	100 μg/l

## Radioactivity:

Except as authorized in an Approval of Registration issued pursuant to Section 3(b)(1)(B)(iii) of this general permit, the concentration of radon in the discharge shall not exceed naturally occurring background concentration.

Discharge of wastewater impacted by any other radiological sources, or from sites specified in Section 3(b)(1)(B)(iii) of this general permit shall be conducted as authorized by an Approval of Registration issued pursuant to Section 3(b)(1)(B)(iii) of this general permit *and* with the applicable 10 CFR 50.36a "Technical specifications on effluents from nuclear power reactors" plus 10 CFR 20 Appendix B "Standards for Protection Against Radiation" and 40 CFR 190, "Environmental Radiation Protection Standards For Nuclear Power Operations".